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(54) PRODUCTION OF HIGH PURITY ALUMINUM NITRIDE POWDER

(57)Abstract:

PURPOSE: To obtain high purity aluminum nitride powder having low uranium and thorium contents, low radiating property, a proper average particle diameter of 2-10 μ m, high heat conductivity and satisfactory suitability to compacting and sintering and suitable for use as the material of the substrate of a highly integrated semiconductor device.

CONSTITUTION: Org. aluminum purified by distillation and ammonia are brought into a vapor phase reaction at 400-1,200° C and a formed precursor is decarbonized and fired at 1,600-1,900° C to produce the objective high purity aluminum nitride powder suitable for use as the peripheral material of a semiconductor device.